



CSE5P: Introduction to Programming (in Python)

Assignment 1

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Instructions

1. The aim of this assignment is to practice the basics of computer programming including getting input from user, converting it to the appropriate type, and storing it in variable(s), writing expressions to obtain desired results, and output-formatting techniques.
2. The deadline for the assignment is **01/18/2019 (Friday) 11:59 PM**.
3. The grade of the assignment is out of **100 pts**.
4. Students are expected to write the code that is easily readable. To this end, they must employ meaningful variable names and comment their code properly. Failing to do that will result in losing points at the discretion of the grader.
5. The output of the codes requires to be **precisely** as shown in the sample runs.
6. Students are allowed to use the Internet, if necessary, to figure out how to compute the diameter, perimeter, and area of a circle. However, they are **NOT** allowed to use the Internet to obtain code fragments. They need to write their program themselves.
7. Students must put the code for each exercise in a separate .py file. The name of the first and second exercises must be HW1_1.py and HW1_2.py, respectively. They must be zipped in a file named First-Name-LastName-ID-HW1.zip and submitted on Canvas.

Exercise

1. Write a Python program that reads in the seconds from midnight, converts it to day time in military format (hh:mm:ss), and prints the result on the screen [50 pts].

Sample Runs:

```
Enter seconds from midnight: 7684
Time in military format is: 02:08:04
```

```
Enter seconds from midnight: 50012
Time in military format is: 13:53:32
```

2. Write a Python program that gets the radius of a circle (in inches) from user and prints the diameter (in feet), perimeter (in feet), and area (in square feet) of the circle with 4 digits of precision on the screen. Consider the value of π as 3.1415. 1 inch is approximately 0.0833 feet [50 pts].

Sample Run:

```
Enter the radius of a circle (in inches): 25.6
The diameter of the circle is: 4.2650 feet
The perimeter of the circle is: 13.3984 feet
The area of the circle is: 14.2859 square feet
```